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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte TAKAYUKI ASAI

Appeal 2009-004739 Application 09/975,505 Technology Center 2400

Decided: December 1, 2009

.

Before LANCE LEONARD BARRY, JAY P. LUCAS, and CAROLYN D. THOMAS, *Administrative Patent Judges*.

BARRY, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Patent Examiner rejected claims 1-24. The Appellant appeals therefrom under 35 U.S.C. § 134(a). We have jurisdiction under 35 U.S.C. § 6(b).

INVENTION

The invention at issue on appeal "filter[s] an object [sent] to a client by a proxy server " (Spec. 1.) More specifically, the client monitors the residual amount of its memory capacity. "[W]hen the residual amount is equal to a fixed amount or less . . . the client transmits to the proxy server information data representing an object format that is allowed to be subsequently transmitted to the client, or an object format that is prohibited from being subsequently transmitted to the client." (*Id.* at 4.)

ILLUSTRATIVE CLAIM

1. An object filtering method for filtering an object, the object requested by a client from a server, the client accessing the server through a proxy server during a session¹, the method comprising:

periodically monitoring a residual amount of memory capacity in the client during said session to provide a plurality of monitoring results, said residual amount of memory capacity being an amount of unused memory capacity in the client that is free to accept data received by the client;

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¹ In his replacement *Summary of Claimed Subject Matter*, the Appellant indicated that the entire preamble corresponds to his "FIG. 1, references 1-4." (p. 3.) The preamble recites *inter alia* "a client," "a server," and "a proxy server." Components 1-4 of the Figure, however, are named WAP GATEWAY, WAP TERMINAL, WAP ORIGIN SERVER, and INTERNET ORIGIN SERVER. The different terminology creates uncertainty about whether the claimed "server" corresponds to the depicted WAP ORIGIN SERVER, INTERNET ORIGIN SERVER, either SERVER, or both SERVERS. In the future, the Appellant should eliminate such uncertainty by mapping individual claimed elements to individual reference numbers of his figures.

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> notifying a filtering condition from the client to said proxy server in accordance with at least one of the plurality of monitoring results; and

filtering the object by said proxy server in accordance with the filtering condition thus notified.

	PRIOR ART	
Gauvin	6,061,686	May 9, 2000
Huang	6,438,576 B1	Aug. 20, 2002 (filed Mar. 29, 1999)
Eerola	6,678,518 B2	Jan. 13, 2004 (filed Dec. 9, 1999)
Ferguson	6,769,019 B2	Jul. 27, 2004 (filed Dec. 10, 1997)
Britton	6,681,380 B1	Jan. 20, 2004 (filed Feb. 15, 2000)

REJECTIONS

Claims 1 and 8-10 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Huang.

Claims 2-4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Huang and Britton.

Claims 5-7 stand rejected under § 103(a) as being unpatentable over Huang and Gauvin.

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Claim 11 stands rejected under § 103(a) as being unpatentable over Huang and Eerola.

Claims 12, 16, 17, 19, 20, and 22-24 stand rejected under § 103(a) as being unpatentable over Huang and Ferguson.

Claims 13 and 14 stand rejected under § 103(a) as being unpatentable over Huang, Ferguson, and Britton.

Claim 15 stands rejected under § 103(a) as being unpatentable over Huang, Ferguson, and Gauvin.

Claims 18 and 21 stand rejected under § 103 (a) as being unpatentable over Huang, Ferguson, and Eerola.

CLAIMS 1-11

The Examiner finds that "[l]ooking now at column 10 lines 35 et seq. [of Huang], one can see the size of the graphic memory that an image can be loaded onto a PDA is 2M bytes." (Ans. 17.) The Appellant argues that the "'size of graphics memory' does <u>not</u> provide information about a <u>residual</u> amount of memory capacity." (App. Br. 7.)

ISSUE

Therefore, the issue before us is whether the Appellant has shown error in the Examiner's finding that Huang monitors a residual amount of memory capacity in a client, the residual amount of memory capacity being

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an amount of unused memory capacity in the client that is free to accept data received by the client.

Law

"It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim, and that anticipation is a fact question" *In re King*, 801 F.2d 1324, 1326 (Fed. Cir. 1986) (citing *Lindemann Maschinenfabrik GMBH v. Am. Hoist & Derrick Co.*, 730 F.2d 1452, 1457 (Fed. Cir. 1984)).

FINDINGS OF FACT ("FFS")

- 1. Huang's "FIG. 1 is a block diagram illustrating the overall architecture of a proxy network As is shown, various clients 130, 131 may be connected through proxy servers (or proxies) 110, 111, 112 to access information objects in the content servers 120, 121." (Col. 5, Il. 23-28.)
- 2. The same reference includes the following explanation of the use of device capabilities.

Object renderings are performed by the proxies 110, 111, 112 based on objects retrieved from the content servers 120, 121. The specific device capabilities, referred to herein as receiver hint information (RHI) . . . are included such as by being appended to the meta-information associated with requests and requested objects. The RHI can be included . . . by one of the proxies (e.g., the first proxy coupled to the requesting device.) In the latter case the proxy 110, 111, 112 can access a table of device capabilities, based on an identifier of the requesting device sent with the request, and can construct the RHI based on the stored information in the table.

(*Id.* at 11. 42-55.) Huang offers the following example of operations.

[T]the local proxy server has access to a table wherein are stored the characteristics (e.g., type of display, *size of graphics memory*, etc.) of the various client devices that can be serviced by the local proxy. The table entry for a particular client device 130, 131 can be stored when the device first registers with [an] ISP [i.e., Internet service provider]. Thereafter, the local proxy server receives an identifier of the client device when the client device makes a request, accesses the table, and constructs the appropriate RHI for inclusion with the object request.

(*Id.* at 11. 56-65 (emphasis added)).

3. "When a requested object passes through the proxy network, any proxy server 110, 111, 112 can perform a complete or partial rendering based on the associated RHI." (Col. 6, Il. 9-11.)

ANALYSIS

Huang discloses a proxy network wherein clients may be connected through proxy servers (or proxies) to access objects from content servers. (FF 1.) Each proxy server can access a table that stores characteristics of the various clients that the proxy can service. (FF 2.) Upon receipt of a client's request for an object, the local proxy server receives an identifier of the client, accesses the table, and constructs the appropriate RHI for inclusion with the object request. (FF 3.)

The characteristics stored in the aforementioned table can include the size of a client's graphics memory. (FF 2.) We agree with the Appellant, however, that "information about a 'size of graphics memory' provides <u>no</u> information about a <u>residual amount</u> of memory capacity at the client device,

where the residual amount of memory capacity is an amount of <u>unused</u> memory capacity in the client that is <u>free to accept data received by the client</u>." (App. Br. 7.) To the contrary, "[t]he size of graphics memory in Huang is a <u>total</u> size of the graphics memory that does <u>not</u> change as data is stored in or erased from the graphics memory." (Reply Br. 4.) In other words, because the table entry for a particular client can be stored when it first registers with an ISP (FF 2), we find that the size of the graphics memory is a static value.

The absence of monitoring a residual amount of memory capacity in a client, the residual amount of memory capacity being an amount of unused memory capacity in the client that is free to accept data received by the client negates anticipation. The Examiner does not allege, let alone show, that the addition of Britton, Gauvin, or Eerola cures the aforementioned deficiency of Huang.

CONCLUSION

Based on the aforementioned facts and analysis, we conclude that the Appellant has shown error in the Examiner's finding that Huang monitors a residual amount of memory capacity in a client, the residual amount of memory capacity being an amount of unused memory capacity in the client that is free to accept data received by the client.

CLAIMS 12-24

The Examiner makes the following findings.

[U]tilizing Huang's sending of device size constraints as a filtering system to render images to fit the data size of the device and Ferguson's ability to more specifically determine if the threshold is met would give the combination of the two inventions the ability to not send data if memory is full and wait till memory is available to send such data.

(Ans. 19.) The Appellant argues that "neither Huang nor Ferguson, alone or in combination, provide an ability to have a proxy server not send data to a client device if memory is full and to wait until memory is available to send such data." (Reply Br. 4.)

ISSUE

Therefore, the issue before us is whether the Appellant has shown error in the Examiner's finding that the teachings from Huang and Ferguson would have suggested responding to a detection that the residual amount of a memory capacity is equal to, or less than, a predetermined threshold by providing a proxy server with a filtering condition for an object transmitted to a client.

Law

The question of obviousness is "based on underlying factual determinations including . . . what th[e] prior art teaches explicitly and inherently " *In re Zurko*, 258 F.3d 1379, 1383 (Fed. Cir. 2001). "'A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to

a person of ordinary skill in the art." *In re Bell*, 991 F.2d 781, 783 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051 (CCPA 1976)).

FINDINGS OF FACT

- 4. Ferguson "allows for the real-time background downloading of Web pages which the user designates as the next Web pages he/she wants to view, while he/she is viewing other content." (Col. 3, 1l. 5-8.) More specifically, "dragged-&-dropped links are downloaded in the background according to a sophisticated schedule of bandwidth priority when the connection between the client and the server is idle, and stored in a cache on the user's hard drive as Q-Links." (*Id.* at 1l. 8-12.)
- 5. The same reference's "Cache Manager 410 . . . keeps track of the total hard drive consumption of the Cache 420. It sends a 'Cache Full' alert once the total storage exceeds a certain threshold." (Col. 11, 11. 1-4.)
- 6. "If a 'Cache Full' condition is detected, the invention prompts the user with the following options for enabling the current download:
 - 1. Cancel all flags in Q-Links list;
 - 2. Go through Q-Links and cancel selected flags;
 - 3. Increase your storage limit;
 - 4. Ignore the message."

(*Id.* at 11. 20-23.)

ANALYSIS

Ferguson downloads links to Web pages that a user designates as the next Web pages he wants to view, while he is viewing other content, and stores the links in a cache. (FF 4.) The same reference monitors the cache's consumption of a hard drive. When the consumption exceeds a threshold, Ferguson generates an alert. (FF 5.) We agree with the Examiner that such monitoring teaches or would have suggested detecting that the residual amount of a memory capacity is equal to, or less than, a predetermined threshold.

Contrary to the Examiners' finding, however, we agree with the Appellant that "neither Huang nor Ferguson, alone or in combination, provide an ability to have a proxy server not send data to a client device if memory is full and to wait until memory is available to send such data." (Reply Br. 4.) More specifically, "the four options presented upon a 'Cache Full' condition in Ferguson are: (i) <u>auto-deletion</u> of web pages; (ii) allow user to <u>select</u> which web pages to <u>delete</u>; (iii) <u>change the capacity</u> of the cache; and (iv) <u>ignore</u> the cache full message." (Reply Br. 4; *see also* FF 6.) None of these options represents a filtering condition for an object transmitted to a client. Furthermore, the options are provided to a user (FF 6) not to a proxy server. The Examiner does not allege, let alone show, that the addition of Britton, Gauvin, or Eerola cures the aforementioned deficiency of Huang and Ferguson.

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CONCLUSION

Based on the aforementioned facts and analysis, we conclude that the Appellant has shown error in the Examiner's finding that the teachings from Huang and Ferguson would have suggested responding to a detection that the residual amount of a memory capacity is equal to, or less than, a predetermined threshold by providing a proxy server with a filtering condition for an object transmitted to a client.

DECISION

We reverse the rejections of claims 1-24.

REVERSED

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